

REMARKS

The Official Action mailed May 13, 2004, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on February 18, 2000, March 10, 2003, and November 26, 2003. A further IDS was submitted July 13, 2004. The Applicants respectfully request that the Examiner provide an initialed copy of the Form PTO-1449 evidencing consideration of the IDS filed July 13, 2004.

Claims 1-9, 16 and 18-32 are pending in the present application. Claims 1, 16, 18 and 30 have been amended to better recite the features of the present invention. Claims 24-26 have been withdrawn from consideration. The Applicants note with appreciation the allowance of claim 6 (page 10, Paper No. 19). Accordingly, claims 1-9, 16, 18-23 and 27-32 are currently elected, of which claims 1, 16, 18 and 30 are independent and claim 18 is generic. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 4 of the Official Action urges cancellation of non-elected claims 24-26. However, as noted by the Examiner, it was agreed that claim 18 is generic (page 2, Paper No. 13). Since claim 18 is generic, claims 24-26 will be in condition for allowance upon allowance of claim 18. Therefore, the Applicants respectfully submit that cancellation of claims 24-26 is not necessary at this time.

Paragraph 6 of the Official Action rejects claims 1-5, 7-9, 16, 18-23 and 27-32 as obvious based on the combination of U.S. Patent No. 5,497,366 to Fujisawa and EP 0316959 to Noda et al. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present invention, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 1 and 16 have been amended to recite that a focus adjusting means support member and a photodetector support member are movable along a direction of an optical axis. Also, independent claim 16 has been amended to recite that a distance is adjusted by moving the first (focus adjusting means) member along the second (photodetector support) member. Independent claims 18 and 30 have been amended to recite a light reflection optical element being attached rotatably around each of first and second axial lines; and fixing means for fixing a light reflection optical element to a chassis, whose rotational position has been adjusted so that focus states of a plurality of spots are substantially equal. Fujisawa and Noda, either alone or in combination, do not teach or suggest at least the above-referenced features of the present invention.

The above-referenced features of the present invention are supported by the description in the specification at page 41, line 16, to page 43, line 4 (emphasis added):

Figs. 11A to 11C illustrate the focus state of each spot (I to J). As already described with Fig. 8, the distance between the pit surface 136 to the circle 146 is not the same in the spot column direction and changes. If the second axial line 122 is generally perpendicular to the pit surface 136, the distances between the opposite end spots I and J among the spots (I to J) and the circle 146 are generally equal and the sizes of the spots (I to J) are generally equal as shown in Fig. 11B and the focus state of each spot (I to J) is balanced. In contrast, if the second axial line 122 becomes oblique relative to the pit surface 136, the distances between the opposite end spots I and J among the spots (I to J) and the circle 146 become different and the sizes of the spots (I to J) become different as shown in Fig. 11A or 11C and the focus state of each spot (I to J) is unbalanced ... By moving the triangular prism 118 in the D1 and/or D2 direction, the spots (I to J) can be entered into an effective area 144 (an area of the pit surface 136 in which spots capable of reading data are reliably entered). By moving the triangular prism 118 in the R1, R2 and/or R3 direction the spots (I to J) can be entered reliably in the effective area 144 and as shown in Fig. 11B the size of each spot (I to J) can be made generally equal and the focus state of each spot (I to J) can be balanced.

In one aspect of the present invention, the present inventors recognize the technical problem that the focus state of each of a plurality of light spots is unbalanced (due to low accuracy of attachment of each optical element in the optical system), which is directly shown in Figs. 11A and 11C. The present invention solves this problem by adopting the optical system structure in which at least one predetermined optical element (e.g., the triangular prism 118) in the optical system is attached rotatably around a predetermined axis (e.g., the axis 120) so as to properly adjust the predetermined optical element. As recited in the claims, the present invention teaches that a focus adjusting means support member and a photodetector support member are movable along a direction of an optical axis (claims 1 and 16). Also, the present invention teaches a light reflection optical element attached rotatably around each of first and second axial lines, and fixing means for fixing a light reflection optical element to a chassis, whose rotational position has been adjusted so that focus states of a

plurality of spots are substantially equal (claims 18 and 30). Fujisawa and Noda do not teach or suggest these features of the amended independent claims.

Also, with respect to claim 1, the Official Action concedes that "Fujisawa does not teach a device for visual confirmation" (page 3, Paper No. 19). The Official Action asserts, using official notice, that "both the concept and the advantages of providing for visual displays which can display different light and spot forming are well known and expected in the art" (*Id.*). The Applicants respectfully submit that a device for visual confirmation is not conventional and would not have been known to one with ordinary skill in the art at the time of the invention. Specifically, the Applicants respectfully submit that the feature of positions (of a focus adjusting means support member and a photodetector support member fixed to a chassis along an optical axis) being visually confirmed that reflected light of each spot becomes incident upon a corresponding one of a series of adjacent photodetectors (claim 1), is not conventional and would not have been known to one with ordinary skill in the art at the time of the invention. In accordance with MPEP § 2144.03, the Applicants respectfully traverse the above-referenced assertions and request that the Examiner cite references in support of his position.

Since Fujisawa and Noda do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained.

Furthermore, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Fujisawa and Noda or to combine reference teachings to achieve the claimed invention.

The Official Action concedes that Fujisawa does not disclose "details of the arrangement of these photodetectors, such as that they are a series of adjacent photodetectors to the extent claimed" and that "Fujisawa does not [disclose a] plurality of spatially separated spots that are detected by these photodetectors" (page 4, Paper No. 19). The Official Action relies on Noda to allegedly teach the features missing from

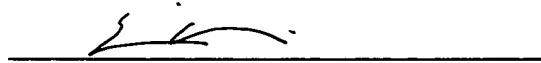
Fujisawa. Although Noda may teach a "plurality of series of light spots" and a "plurality of series of photodetectors," Noda does not recognize the problem that a focus state of each light spot is unbalanced and thus cannot teach or suggest the solution to such problem as in the present invention. As such, there is no suggestion or motivation to modify Fujisawa and Noda or to combine reference teachings to achieve a focus adjusting means support member and a photodetector support member which are movable along a direction of an optical axis or a light reflection optical element attached rotatably around each of first and second axial lines, and fixing means for fixing a light reflection optical element to a chassis, whose rotational position has been adjusted so that focus states of a plurality of spots are substantially equal, as recited in the independent claims of the present invention.

In the present application, it is respectfully submitted that the prior art of record, alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,


Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789